

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009153**Date Inspected:** 21-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Xian Ping**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG & TOWER Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

**BAY 1**

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #128 located on Counter Weight CW001 – PP072. Welder is identified as 219189. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

FCAW process welding of weld joint #130 located on Counter Weight CW001 – PP068. Welder is identified as 219189. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

FCAW process welding of weld joint #127 located on Counter Weight CW002 – PP088. Welder is identified as 219189. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

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### BAY 2

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #011 located on Floor Beam FB3095 – 001. Welder is identified as 206358. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

FCAW process welding of weld joint #013 located on Floor Beam FB3090 – 001. Welder is identified as 062438. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

FCAW process welding of weld joint #035 located on Floor Beam FB3019 – 001. Welder is identified as 045203. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

FCAW process welding of weld joint #010 located on Floor Beam FB3090 – 001. Welder is identified as 204730. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

### BAY 3

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #012 located on Longitudinal Diaphragm LD002 – 048. Welder is identified as 051356. ZPMC QC is identified as Yin Dong Hai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – P4 – F.

FCAW process welding of weld joint #004 located on Longitudinal Diaphragm LD001 – 048. Welder is identified as 051356. ZPMC QC is identified as Yin Dong Hai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

### BAY 5

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #009 located on Traveler Rail Bracket TR1E – PP062. Welder is identified as 051874. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4c – F.

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FCAW process welding of weld joint #001 located on Traveler Rail 10TR3 – 011. Welder is identified as 215185. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F.

FCAW process welding of weld joint #007 located on Traveler Rail Bracket TR5D – PP057. Welder is identified as 053742. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4c – F.

FCAW process welding of weld joint #002 located on Traveler Rail 11TR9 – 007. Welder is identified as 215185. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F.

### BAY 6

#### Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. DP3049 – 001 – 007~021; 061; 062 - Green Tag # 10636
- a. SA6017 – 001 – 001; 002

This QA Inspector observed the following work in progress:

#### TOWER

SMAW process welding of weld joint #2A located on WD1 – A305 – 77M – 2. Welder is identified as 053753. ZPMC QC is identified as Su Zhen Rong. The welding variables recorded by QC appeared to comply with the WPS – 485 – SMAW – 2G (2F) FCM – Repair – 1.

SMAW process welding of weld joint #2A located on WD1 – A305 – 65M – 1. Welder is identified as 067707. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – 485 – SMAW – 2G (2F) FCM – Repair – 1.

SMAW process welding of weld joint #8B located on WD1 – A305 – 77M – 2. Welder is identified as 053753. ZPMC QC is identified as Su Zhen Rong. The welding variables recorded by QC appeared to comply with the WPS – 485 – SMAW – 2G (2F) FCM – Repair – 1.

#### Cross Beam - 9

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #026 located on Floor Beam FB205 – 024. Welder is identified as 048625. ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4b – F.

FCAW process welding of weld joint #002 located on Cross Beam CB202A – 009. Welder is identified as 220688.

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ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4b – F.

FCAW process welding of weld joint #025 located on Floor Beam FB205 – 023. Welder is identified as 048625. ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4b – F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No Relevant Conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Kumar,Sandeep	Quality Assurance Inspector
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<b>Reviewed By:</b>	Prue,Erik	QA Reviewer
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